ON A FEW NEW AND OLD CHRYSOMELIDÆ

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In the list of Chrysomelidæ, which I accepted to furnish for the list of insects of New York State to be published in the near future by Cornell University, appear a few new names necessary on account of misidentifications, which, though known to me for some time, I have neglected to publish so far. In the species of *Donacia* occurring in New York and elsewhere I have been compelled to make quite a number of changes, but these, I hope, will be published in a revision of the North American species of *Donacia* sooner than the list will appear.

Phytodecta pallida, Linn.

This is supposed to be the common species of the genus with quite a wide distribution, but is certainly not identical with the European species.

Kirby, 1837, first recorded the species from Canada as the European *rufipes*. Crotch, 1873, rejects this identification and says that it is the same as the European *pallida* and also places *simplex* Suffr., as synonym of the former.

Comparing our insect with the descriptions and specimens of the European *pallida,* kindly sent me by Mr. Julius Weise of Germany, made it quite clear that the two are different species. Our American insect is a true *Phytodecta,* while the European *pallida* belongs in the subgenus *Spartophila,* and besides other differences the latter species has the elytral punctures coarser and the sixth and seventh outer striæ confused about the middle, in our American insect the punctures are much finer and all the rows regular.

Mr. Howard Notman gave an interesting note in Bulletin Brooklyn Entomological Society, p. 75, on collecting two apparently different species of *Phytodecta.* One, which he identified as *affinis* (*arctica*) he took only on willow, the other which he called *pallida* occurred only on poplar. These latter specimens were smaller and generally less heavily marked especially on the pro-

thorax, and extracting the genitalia of the male of each he found them to be entirely different. Mr. Notman kindly loaned me his specimens of both as well as the genitalia and I have tried to find a good external structural character to support the great difference in the genitalia. In this I did not succeed, but there is a difference in the two in regard to the coloration of the head. In the larger specimens, which he called *affinis* (*arctica*) the head is always bi-colored, that is the posterior part is black and the anterior part reddish, even in specimens in which the thoracic and elytral maculations are largely confluent. In the smaller specimens, his *pallida,* where the elytral and especially the thoracic maculation is smaller, the head is entirely black with occasionally a more or less distinct reddish spot between the eyes on each side of middle. Both are not *arctica* nor *pallida.*

Phytodecta americana, new species.

Phytodecta rufipes, Kirby, Fauna Bor. Am., p. 213.
Chrysomela rufipes, Rogers, Proc. Acad. Nat. Sc., Phil., vol. VIII, p. 35.
Gonioctena pallida, Crotch, Proc. Acad. Nat. Sc., Phil., vol. XXV, p. 52.
Phytodecta affinis (*arctica*), Notman, Bull. Brookl. Ent. Soc., vol. XVI, p. 75.

Reddish yellow, including legs and antennæ; head above, two large triangular basal spots, generally largely confluent basally, scutellum and five large spots, two subbasal, one laterally at about middle and two subapical, black, the elytral spots often more or less confluent or elytra black with basal, sutural, apical and lateral margins reddish; body beneath black, the last or the two last ventral segments more or less reddish yellow. Head sparsely punctate, punctures slightly smaller at middle; third joint of antennæ not as long as the next two. Prothorax strongly transverse, about twice as wide at base as long at middle; sides feebly arcuate; basal angles rectangular, acute, anterior angles broadly rounded; surface sparsely and finely punctate, with a few much larger punctures intermixed, the punctures laterally still coarser. Elytra slightly wider behind middle; punctures of the regular rows moderate; intervals finely and rather sparsely punctate. Ventral segments sparsely punctate, punctures moderately coarse. All the tibiæ with a distinct tooth near apex, the tooth of front tibiæ generally not as large as those om middle and hind tibiæ. Length 5.5-6 mm.

Type from Keene Valley, Essex Co., N. Y. (Notman). Other specimens seen are from Rockaway Beach, Long Island (Schott); Derrick City, Pa. (Davis); Duluth, Minn.; Prince Edward Co.,

Ont.; Medicine Hat, Alberta (Carr). Two paratypes are in Mr. Notman's collection.

This species is very close to the European *rufipes* and except for slightly smaller size and the elytral intervals sparsely punctate it scarcely seems to differ otherwise.

Phytodecta notmani, new species.
Phytodecta pallida, Notman, Bull. Brookl. Ent. Soc., vol. XVI, p. 75.

Very much like *americana* in form, coloration, and sculpture of prothorax and elytra except being slightly smaller, the black spots on the prothorax small, never triangular, about the size of the scutellum, but less elongate and the head is black with often a more or less distinct reddish spot on each side of middle between the eyes. Length 5-5.5 mm.

Keene Valley, Essex Co., N. Y., collected by Mr. Howard Notman, to whom I am indebted for specimens; two paratypes are in Mr. Notman's collection.

The North American species of *Phytodecta* may be readily identified by the following table:

1. Third antennal joint as long or longer than the two following joints; femora black, tibiæ bicolored.....**arctica** Mann.
   Third antennal joint shorter, not as long as the two following joints, legs black or entirely pale.....2
2. Legs black, intervals of elytra rather closely punctate, outer joints of antennæ black.....**viminalis** Linn.
   Legs and antennæ unicolorous pale; intervals of elytra sparsely and finely punctate.....3
3. Thoracic spots large, generally triangular and very often transversely confluent; head bicolored, anterior part pale, posteriorly black .....**americana** Schffr.
   Thoracic spots small more or less subquadrate, never triangular, about as large or smaller than the scutellum; head black, occasionally with a more or less distinct, small, pale spot on each side above the antennal insertion.....**notmani** Schffr.

Phytodecta arctica Mann. has been compared at various times with the European *nivosa, linnæana, triandræ,* and *affinis.* If it is the same or a variety of any of these remains to be confirmed by a close study of specimens of all these species. The European *viminalis* is once recorded from Alaska but to my knowledge there is no other record nor are there apparently any North American specimens in our collections. *Phytodecta simplex* is described

from North America by Suffrian as "testacea, antennis apice nigricantibus, elytris profunde punctatostriatis, tibiis anticis muticis, mediis fortiter calcaratis." I have not seen anything that agrees with this. If Suffrian's specimen came really from North America then it is the only one of our species which belong in the subgenus *Spartophila* and apparently closely allied to *pallida*.

Disonycha davisi, new species.

Similar to *caroliniana* but slightly stouter and shorter with less oval elytra and femora more or less distinctly infuscate. Head with a few coarse punctures near each eye which extend nearly to the middle; frontal tubercles well limited below; antennal joints short and rather stout. Prothorax strongly transverse; basal angles distinct but obtuse; anterior angles oblique; surface distinctly punctate. Elytra at base not wider than the thorax at base; sides feebly arcuate; surface distinctly punctate with moderately large punctures. Ventral segments of abdomen moderately closely punctate. Length 5.25-6.75 mm.

Anglesea, N. J., June (type); New Brunswick, Vineland and Lahaway, N. J.; Wyandanch and Yaphank (Davis), Long Island, N. Y.; Kansas, Onah, Manitoba (Wallis).

I have compared this species with the more common *caroliniana* but it agrees in form, antennal structure, thoracic and elytral punctuation much better with *arizonæ*. This latter, however, has the abdominal segments very sparsely punctate.

This is very likely one of the forms or species included by Dr. Horn under his *crenicollis,* which latter, as I have suggested in Journal New York Entomological Society, Vol. XXVII, p. 334, is not that species but *fumata* Lec. I have since seen Dr. Le Conte's type and my surmise of the wrong identification of *fumata* proved to be correct.

The infuscate femora are by no means constant, in some specimens the hind femora at least are reddish, but then generally the two anterior pair are more or less clouded. One specimen has all the femora dark. The marginal vitta of elytra in all my specimens attains the sutural vitta.

Disonycha asteris, new species.

Above flavous, head posteriorly, labrum, antennæ, spots on prothorax, scutellum, a sutural, discal and marginal vitta black, the latter attaining the sutural vitta; body below black except prothorax, two or three of the

apical sugments of abdomen and femora, which are reddish or flavous. Head smooth at middle a few coarse punctures near each eye; tubercles divided by a moderately deep impression. Antennæ reaching to about middle of elytra; joints rather elongate and somewhat stout, similar to those of the common eastern form of *quinquevittata*. Prothorax about twice as wide as long; sides feebly arcuately narrowing to apex; basal angles obtuse, blunt; anterior angles oblique; surface alutaceous, finely and sparsely punctate. Elytra at base not wider than thorax at base; sides feebly rounded; surface finely punctate Body below alutaceous; abdominal segments moderately closely and somewhat finely punctate. Length 6-7 mm.

Stonewall (type), Aweme, Winnipeg, Manitoba (J. B. Wallis); Edmonton and Medicine Hat, Alberta (F. S. Carr).

Two paratypes from Stonewall are in the collection of Mr. Wallis, who sent me the first specimens quite some time ago. These specimens were taken on white aster in a swamp, according to the label on the specimens.

This will be readily known from all vittate Disonycha's with closely punctate ventral segments by the first two, three or four dark ventral segments except *latifrons* from Arizona and Colorado, which has the frontal tubercles of the head flat, even with the rest of the surface and only indicated by finely impressed lines and the elytral vittæ are generally also narrower. *D. fumata* Lec. (*crenicollis* Horn not Say) has also the ventral segments occasionally slightly infuscated, but in this species the femora are generally more or less fumate, the frontal tubercles are much more prominent and the antennal joints are much narrower and more elongate. Although they occur in widely separated localities, both *asteris* and *latifrons* are very close and do not differ very much from each other.

Haltica betulæ, new species.

Slightly shorter and a little more convex than *carinata* Germ. (*ulmi* Woods), color green metallic; prothorax and elytra finely alutaceous, feebly shining. Antennæ about half the length of the body or slightly longer, black with a feeble greenish tint, third joint slightly shorter than fourth, tenth joint slightly shorter than twice longer than wide. Head smooth above; eyes rather small, not as wide as half the space between the eyes; tubercles limited above by a distinctly impressed line, above which are sometimes a few punctures; near the eyes an area of somewhat large punctures. Prothorax a little wider at base than long; sides

parallel from slightly above middle to base, anteriorly slightly narrowing towards apical angles; surface rather indistinctly alutaceous, feebly shining and very feebly punctate, ante-basal groove deeply impressed and entire. Elytra slightly wider than the prothorax at base, distinctly alutaceous and generally duller than the prothorax, finely and rather sparsely punctate, to punctures more indistinct or absent towards apex. Body beneath and legs with greenish metallic lustre; elytral epipleuræ terminating at or slightly beyond the apex of the second ventral segment. Length 3-3.75 mm.; width about 1.5-2 mm.

Oliverea, Catskill Mts., N. Y.

A small number of specimens were taken at the above locality on June 18 and 21 on the leaves of birch by Mr. Ernest Shoemaker, in which collection is also a paratype. He informs me that they were very numerous on the leaves of birch but collected only a small number.

This species is readily known from all our species by its short elytral epipleuræ. In all our Haltica's, as far as I know them, the elytral epipleuræ terminate at the apex of the fourth ventral segment, while in *betulæ* the epipleuræ terminate at the apex of the second ventral segment, in only two of the twenty-five specimens examined it extends almost to the third segment. *H. woodsi,* another green species, is a little smaller, with the elytra more shining, more coarsely punctate and the lateral margin of prothorax near apical angles slightly more incrassate and oblique.

Haltica ignita, Ill.

Until recently no small *Haltica* was known that did agree with the description of *ignita,* that is in regard to the possession of a lateral elytral plica. Mr. Fall in Psyche, vol. XXVII, p. 106, calls attention to three specimens received from Dr. Chittenden of which the female has, as he says, "a tolerable well defined lateral elytral plica," and further on says that it might serve very well for the type of Illiger's description. For a number of years I have had five specimens of possibly the same thing, males and females, which I had labelled *ignita.* Two were labelled "N. Y.", two from Pine Island, N. Y., and one West Point, N. Y. They all show a more or less distinct lateral elytral plica in both sexes, which is always more strongly defined towards its apex than at middle and towards base, where it is faint or absent. In the list

of Chrysomelidæ above referred to these are listed as *H. ignita* Ill. and I do not see any reason to do otherwise as they agree very well with the description. Some of the specimens have the head, prothorax and underside with a metallic green or greenish-blue tint. In addition to the above localities I have seen specimens from South Carolina and Alabama, which are in Mr. Liebeck's collection.

Haltica liebecki, new species.

Form of *californica,* color bluish purple to reddish; scutellum more or less distinctly metallic green; antennæ black with a slight brassy tint. Head smooth, very finely alutaceous and feebly shining; eyes, as seen from the front a little smaller than half the space between the eyes. Prothorax slightly wider at base than long at middle, sides feebly narrowing towards apex and narrowly reflexed; surface finely punctate with a few coarse punctures in a short oblique space near the apical angles; ante-basal impression entire or nearly so, finely impressed at middle, more deeply at sides. Elytra oval, at middle less than twice as wide as the prothorax at base; surface finely not closely punctate, the punctures generally a little larger than those on prothorax, intermixed finer punctuation scarcely evident. Body beneath alutaceous, of the same color as above, but occasionally more bluish or even greenish. Last ventral segment of male with a deep and relatively wide median impression at apical half. Length 4-4.5 mm.

♂ Huachuca Mts., Arizona.

This species is closely allied to *californica* in form but has shorter and stouter antennal joints. I had placed *liebecki* for a time doubtfully as *vicaria,* but specimens of the latter species kindly sent me by Mr. Liebeck differ in being of more elongate form with less oval elytra.

Haltica cuprascens Blatchley

Through Mr. Blatchley's kindness I have seen the type and one of the co-types of *cuprascens* and according to these it is not what Mr. Fall in Psyche, Vol. XXVII, p. 103, identifies as that species, but is apparently what he describes on p. 108 as *H. purpurea.* His description of the latter species at least agrees very well with the types of *cuprascens.* The *cuprascens* of Mr. Fall is what Dr. Woods in his paper on the Maine Haltica's records wrongly as *torquata* and for which later on Malloch proposed the name *sylvia,* which name will stand for this species.

Haltica evicta shoemakeri, new variety.

Differs from typical *evicta* in having the elytra dull and more finely punctate. Length 4 mm.

Plattsburg, N. Y. (type); Catskill Mts., N. Y.; Stephenville, Bay St. George, Newfoundland (Engelhardt); Frankonia, N. H.; Illinois.

Type USNM 42430

The New York specimens were collected by Mr. Shoemaker and that from the Catskill Mts., a paratype, is in his collection. The two specimens from New Hampshire and Illinois are in Mr. Liebeck's collection.

This is apparently the extreme eastern form of the typical western *evicta*. My twelve specimens of the typical insect, which are from British Columbia, Oregon and Washington, are all shining and more coarsely punctate.

Chalcoides helxines violacea, Melsh.

These are the purple or bluish-red specimens, which also have the posterior femora in great part or entirely dark. The form is apparently a little more robust than in the typical insect and the ante-basal groove of prothorax is frequently less deeply impressed. I am also under the impression that this form feeds on a different plant than the typical form. In view of all this I think it is entitled to recognition.